METHOD TO CARRY AN ITEM WITHIN A RETAIL SHOPPING FACILITY

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 62/218,426, filed Sep. 14, 2015, which is incorporated herein by reference in its entirety.

TECHNICAL FIELD

[0002] These teachings relate generally to retail shopping facilities and more particularly to the movement of items within such a facility.

BACKGROUND

[0003] In a modern retail store environment, there is a need to improve the customer experience and/or convenience for the customer. Whether shopping in a large format (big box) store or smaller format (neighborhood) store, customers often require assistance that employees of the store can provide. Unfortunately, there may not always be enough employees available to assist customers in as timely a manner as the customer might wish.

[0004] For example, an item that a customer wishes to purchase (or already has purchased) may be located in a non-public part of the retail shopping facility such as a back storeroom. In this case a facility associate must bring that item out to the public area of the retail shopping facility to deliver that item to the customer. When there is not an associate immediately available to accomplish this task, the customer experiences delay. That experienced delay, in turn, can contribute to reduced customer satisfaction.

[0005] With increasing competition from non-traditional shopping mechanisms, such as online shopping provided by e-commerce merchants and alternative store formats, it can be important for "brick and mortar" retailers to focus on improving the overall customer experience and/or convenience.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] The above needs are at least partially met through provision of the method to carry an item within a retail shopping facility described in the following detailed description, particularly when studied in conjunction with the drawings, wherein:

[0007] FIG. **1** comprises a flow diagram as configured in accordance with various embodiments of these teachings;

[0008] FIG. **2** comprises a top plan schematic view as configured in accordance with various embodiments of these teachings; and

[0009] FIG. **3** comprises a block diagram as configured in accordance with various embodiments of these teachings.

[0010] Elements in the figures are illustrated for simplicity and clarity and have not necessarily been drawn to scale. For example, the dimensions and/or relative positioning of some of the elements in the figures may be exaggerated relative to other elements to help to improve understanding of various embodiments of the present teachings. Also, common but well-understood elements that are useful or necessary in a commercially feasible embodiment are often not depicted in order to facilitate a less obstructed view of these various embodiments of the present teachings. Certain actions and/or steps may be described or depicted in a particular order of occurrence while those skilled in the art will understand that such specificity with respect to sequence is not actually required. The terms and expressions used herein have the ordinary technical meaning as is accorded to such terms and expressions by persons skilled in the technical field as set forth above except where different specific meanings have otherwise been set forth herein.

DETAILED DESCRIPTION

[0011] Generally speaking, these teachings provide for dispatching an airborne drone to an item of inventory located within a retail shopping facility, securing that item of inventory to the airborne drone, and then directing the airborne drone to carry the item of inventory to a delivery area located within the retail shopping facility. In a typical application setting the flightpath of the airborne drone will not include any traversals of open space.

[0012] By one approach a central computer system for the retail shopping facility conducts the foregoing dispatching and directing of the airborne drone. In these regards the central computer system can utilize a three-dimensional map of the retail shopping facility when determining a flightpath for the airborne drone. In lieu of the foregoing or in addition thereto, the central computer system can employ information from one or more on-board sensors for the airborne drone and/or one or more installed sensors for the retail shopping facility to detect obstacles in the flightpath of the airborne drone.

[0013] These teachings are highly flexible in practice and will accommodate modifications or additional functionality. For example, if desired, these teachings will accommodate landing the airborne drone at the aforementioned delivery area and detaching the item of inventory from the airborne drone. As another example, these teachings will accommodate directing the airborne drone away from the delivery area such that the airborne drone leaves the item of inventory at the delivery area.

[0014] So configured, one or more items of inventory can be relatively quickly and efficiently moved from one part of a retail shopping facility to another part of the retail shopping facility. This can include moving items of inventory between non-public and public areas of the retail shopping facility. Accordingly, at least in many cases a customer's wait for items that are not immediately available in their present location can be considerably reduced as compared to many other prior art approaches in these regards.

[0015] These and other benefits may become clearer upon making a thorough review and study of the following detailed description. Referring now to the drawings, and in particular to FIG. **1**, an illustrative process **100** that is compatible with many of these teachings will now be presented. For the sake of an illustrative example it will be presumed here that a control circuit of choice carries out the actions, steps, and/or functions of this process **100**. FIG. **2** provides an illustrative example of an application setting in these regards.

[0016] In this particular example, the retail shopping facility **200** includes such a control circuit **201**. Being a "circuit," the control circuit **201** therefore comprises structure that includes at least one (and typically many) electrically-conductive paths (such as paths comprised of a conductive metal such as copper or silver) that convey electricity in an ordered manner, which path(s) will also typically include corresponding electrical components (both passive (such as